

AMENDMENTS

Please amend the following claims:

Claim 1 (Currently amended) A pharmaceutical composition comprising:

a) ____ a psychotropic, neurotropic or neurological drug, or an antibiotic, antibacterial, antimycotic, antiviral, antiproliferative or antineoplastic drug, wherein the drug is L-dopa, hydroxytryptamine, amantadine, benztropine, bromocryptine, diphenhydramine, levodopa, pergolid, trihexphenidyl, ethosuximide, valproic acid, carbamazepine, 10-hydroxycarbamazepine, 11-hydroxycarbamazepine, primidone, gabapentin, lamotrigine, felbamate, paramethadione, trimethadione, phenothiazine, thioxanthene, clozapine, haldoperidol, loxapine, a benzodiazapene antidepressants of the norepinephrine reuptake inhibitor type, a monoamine oxidase inhibitor, carotene, glutathione, N-acetylcysteine, methotrexate, azidothymidine, dideoxyinosine, dideoxycytosine, acyclovir, or gancyclovir;

b) ____ an amino acid or amino acid derivative specifically transported into a physiologically-protected site, wherein the amino acid or derivative thereof is 5-hydroxytryptophan, serotonin, or melatonin;

c) ____ two linker functional groups and

d) ____ a spacer,

wherein the spacer has a first end and a second end and wherein the amino acid or amino acid derivative is attached to the first end of the spacer through a first linker functional group and the drug is attached to the second end of the spacer through a second linker functional group.

Claim 2 (cancelled)

Claim 3 (original): A pharmaceutical composition according to Claim 1 wherein the spacer allows the drug to act without being released at an intracellular site and wherein the first linker functional group attached to the first end of the spacer is strong and the second linker functional group attached to the second end of the spacer is weak.

Claim 4 (original): A pharmaceutical composition according to Claim 1 wherein the spacer allows the facilitated hydrolytic release of the drug at an intracellular site and wherein the first linker functional group attached to the first end of the spacer is strong and the second linker functional group attached to the second end of the spacer is weak.

Claim 5 (original): A pharmaceutical composition according to Claim 1 wherein the spacer allows the facilitated enzymatic release of the drug at an intracellular site and wherein the first linker functional group attached to the first end of the spacer is strong and the second linker functional group attached to the second end of the spacer is weak.

Claim 6 (cancelled)

Claim 7 (currently amended): A pharmaceutical composition comprising:

a) _____ a psychotropic, neurotropic or neurological drug, or an antibiotic, antibacterial, antimycotic, antiviral, antiproliferative or antineoplastic drug, wherein the drug is L-dopa, hydroxytryptamine, amantadine, benztropine, bromocryptine, diphenhydramine, levadopa, pergolid, trihexphenidyl, ethosuximide, valproic acid, carbamazepine, 10-hydroxycarbamazepine, 11-hydroxycarbamazepine, primidone, gabapentin, lamotrigine, felbamate, paramethadione, trimethadione, phenothiazine, thioxanthene, clozapine, haldoperidol, loxapine, a benzodiazapene antidepressants of the norepinephrine reuptake inhibitor type, a monoamine oxidase inhibitor, carotene, glutathione, N-acetylcysteine, methotrexate, azidothymidine, dideoxyinosine, dideoxycytosine, acyclovir, or gancyclovir,

wherein the drug has ~~having~~ a first functional linker group, and

b) _____ an amino acid or amino acid derivative specifically transported into a physiologically-protected site, wherein the amino acid or derivative thereof is 5-hydroxytryptophan, serotonin, or melatonin,

wherein the amino acid or derivative thereof has ~~having~~ a second functional linker group,

wherein the drug is covalently linked to the amino acid or amino acid derivative by a chemical bond between the first and second functional linker groups.

Claim 8 (currently amended): A pharmaceutical composition according to Claim 7 wherein the first functional linker group is a hydroxyl group, a primary or secondary amino group, a phosphate group or a carboxylic acid group.

Claim 9 (currently amended): A pharmaceutical composition according to Claim 7 wherein the second functional linker group is a hydroxyl group, a primary or secondary amino group, a phosphate group or a carboxylic acid group.

Claims 10-17 (cancelled)

Claim 18 (currently amended): A pharmaceutical composition according to ~~Claims 1 or 7~~ Claim 1, wherein the spacer is a peptide of formula (amino acid)_n, wherein n is an integer between 2 and 25, and the peptide comprises a polymer of one or more amino acids.

Claims 19-33 (cancelled)